What is claimed is

1. A vehicle controller comprising a rewritable memory for storing first security data used to determine whether rewriting to the rewritable memory is permitted;

wherein the vehicle controller is configured, in response to receipt of new security data from an external rewriting device, to delete the first security data, and to write the new security data into the rewritable memory.

2. The vehicle controller of claim 1, wherein the program for deleting the first security data and writing the new security data is stored in a non-rewritable memory.

3. The vehicle controller of claim 1, wherein an anti-theft system is connected to the vehicle controller; and

wherein rewriting to the rewritable memory is permitted if the anti-theft system permits an operation as to the vehicle.

4. The vehicle controller of claim 1, wherein the rewritable memory is implemented in any form of a flash memory, EPROM and EEPROM.

5. The vehicle controller of claim 2, wherein the rewritable memory and the non-rewritable memory are implemented in a single memory.

6. A rewriting device for rewriting a rewritable memory included in a vehicle controller;

a memory for storing new security data;

a communication means for transferring the new security data to write the new security data into the rewritable memory; and

wherein the new security data written in the rewritable memory is used to determine whether rewriting to the rewritable memory is permitted.

7. The rewriting device of claim 6, wherein the rewritable memory stores first security data that is used to determine whether rewriting to the rewritable memory is permitted; and

the rewriting device requests the vehicle controller to delete the first security data and write the transferred new security data into the rewritable memory.

8. The rewriting device of claim 6, further comprising an user interface that enables a user to create the new security data.

9. The rewriting device of claim 6, wherein the controller is further configured to assemble serial data blocks from the new security data; and

wherein the communication means transfers the serial data blocks via serial communication.

10. A memory rewriting system for a vehicle controller comprising:

a rewritable memory mounted on the vehicle contoller, the rewritable memory storing first security data, the first security data being used to determine whether rewriting to the rewritable memory is permitted;

a rewriting device for transferring new security data to the vehicle controller; and

wherein the vehicle controller is configured to delete the first security data and to write the new security data into the rewritable memory.

11. The memory rewriting system of claim 10, wherein the program for deleting the first security data and for writing the new security data is stored in a non-rewritable memory.

12. The memory rewriting system of claim 10, wherein the new security data is arbitrarily created using the rewriting device.

13. The memory rewriting system of claim 10, wherein an anti-theft system is connected to the vehicle controller; and

wherein rewriting to the rewritable memory is permitted if the anti-theft system permits an operation as to the vehicle.

14. The memory rewriting system of claim 10,

wherein the rewriting device stores second security data; and

the vehicle controller is configured to compare the first security data with the second security data transferred from

the rewriting device, and to permit rewriting to the rewritable memory if the first security data matches the second security data.

15. The memory rewriting system of claim 10, wherein the first security data and the second security data have the same function;

the rewriting device comprises a program to calculate a first function value for a number based on the function of the first security data; and

the vehicle controller is configured to calculate a second function value for the number based on the function of the second security data, to compare the first function value with the second function value transferred from the rewriting device, and to permit the rewriting device to rewrite to the rewritable memory if the first function value is equal to the second function value.

16. The memory rewriting system of claim 15, wherein the number is generated from random numbers in the vehicle controller, and the number being transferred to the rewriting device from the vehicle controller.

17. The memory rewriting system of claim 10, wherein the new security data is transferred via serial communication.

18. A method for rewriting data stored in a rewritable memory in the vehicle controller, the method comprising;

receiving new security data transferred from an external rewriting device to the vehicle controller,

deleting first security data stored in the rewritable memory, the first security data being used to determine whether rewriting to the rewritable memory is permitted, and

writing the new security data into the rewritable memory.

19. The method of claim 18, the deleting the first security data and the writing the new security data are performed by a program stored in a non-rewritable memory mounted on the vehicle controller.

20. The method of claim 18, wherein an anti-theft system is connected to the vehicle controller, and

wherein rewriting to the rewritable memory is permitted if the anti-theft system permits an operation as to the vehicle.

21. The method of claim 18,

wherein the rewriting device stores second security data; and

wherein the determination of the permission for rewriting to the rewritable memory comprising:

comparing the first security data with the second security data transferred from the rewriting device;

permitting rewriting to the rewritable memory if the first security data matches the second security data.

22. The method of claim 21, wherein the first security data and the second security data have the same function;

wherein the determination of the permission for rewriting to the rewritable memory comprising:

calculating a first function value for a number based on the function of the first security data in the vehicle controller;

calculating a second function value for the number based on the function of the second security data in the rewriting device;

comparing the first function value with the second function value; and

permitting the rewriting device to rewrite to the rewritable memory if the first function value is equal to the second function value.